

REMARKS

Claims 1-27 are pending in the above-identified application and stand rejected. Applicants, having amended the claims, respectfully request reconsideration.

Rejections under 35 U.S.C. §102

Claims 1-12 stand rejected under §102(b) as anticipated by Trott (U.S. 5,851,208). Applicants respectfully request the examiner reconsider these rejections in view of the foregoing amendments.

Claim 1

Claim 1 is amended to recite a surgical tool with a conduit that includes “exactly two bends” between a head end and a drive end. A drive mechanism extending through the conduit rotates on substantially parallel first and second axes at the respective head and drive ends, and further rotates on a third axis at angles with respect to the first and second axes. Applicants’ Figure 3 depicts an embodiment of claim 1, and is reproduced below for ease of review.

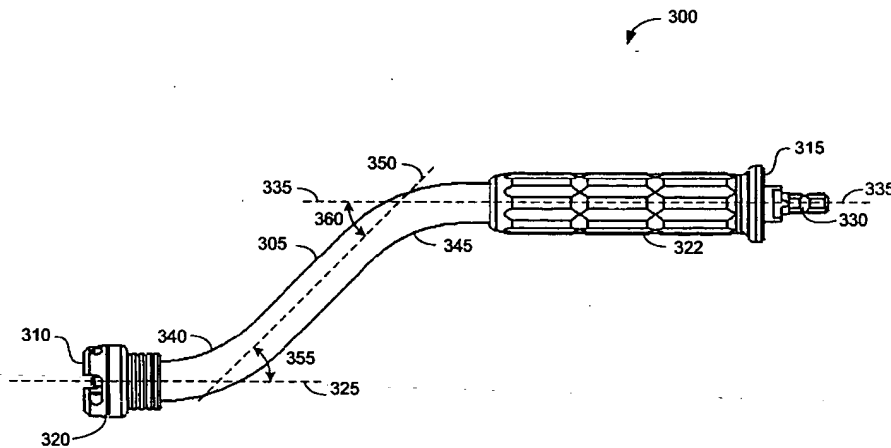


Fig. 3

The amendment to claim 1 clarifies the important point that the conduit 305 includes *exactly* two bends 340 and 345, “so a portion of conduit 305 extends along a third axis 350 at an angle 355 with respect to first rotational axis 325 and an angle 360 with respect to second rotational axis 335” (Spec., [0024]). Unlike the single-bend tool of Trott, “[t]he double bend of tool 300 avoids soft tissue for improved visibility and positional accuracy, but still provides a straight-line approach to tool placement” (*Ibid.*). Though not shown in Figure 3, the drive

mechanism of claim 1 requires “a plurality of interlocking links...” These are included to combat “gripping and vibration” that can occur when actuating “an acetabular reamer cup against hard or uneven bone surfaces” (*Id. at* [0025]).

To establish a *prima facie* case of anticipation, every element of the claim in question must be taught in a single reference. Claim 1 recites a surgical tool that includes exactly two bends between head and drive ends, and that provides rotation along parallel axes at the head and drive ends. These features are plainly evident in Figure 3, *supra*. Trott teaches surgical tools that have but one bend and in which the head and drive ends do not define parallel rotational axis. Claim 1, as amended, thus distinguishes Trott. The rejection of claim 1 should therefore be withdrawn.

Claims 3 and 5

Claims 3 and 5 are canceled, rendering moot the rejections of those claims.

Claims 2, 4, and 6-10

Claims 2, 4, and 6-10 depend from claim 1, and therefore distinguish Trott for at least the same reasons claim 1 distinguishes. The rejections of those claims should therefore be withdrawn.

Claims 11 and 12

Claim 11 is amended to include the language of originally filed claims 1 and 5, from which claim 11 depended. Claim 11 adds to this surgical instrument bushings disposed between adjacent interlocking links. Figure 5 of Applicants’ specification most clearly illustrates an embodiment of such “bushings” as bushings 410. Figure 5 is reproduced below.

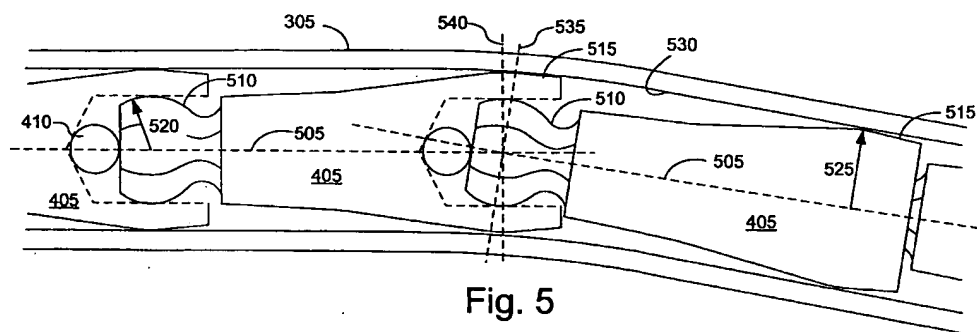


Fig. 5

Applicants' specification explains the importance of bushing 410 thusly:

The intervening bushing 410 maintains the intersection of the two pivotal axes over a range of angles. In other words, the pivotal axes of the male and female ends remain substantially coaxial when the rotational axes 505 of adjacent links 405 are misaligned. This link arrangement prevents links 405 from binding against one another and against interior wall 530 when transmitting torque around bends in conduit 305.

(Spec., [0028]) Bushings 410 thus maintain the proper alignment over a range of angles for adjacent links 405.

As noted above, anticipation requires all elements of a claim be taught in a single reference. Nothing in Trott teaches or suggests the claimed "bushing," so the rejection of claim 11 over Trott should be withdrawn. Also important, each of Trott's links 50 has "a throughbore 56" (Trott, 4:47-48), through which passes debris (*Id.* 5:60-63) or a guidewire (*Id.* 6:1-5). The inclusion of a bushing, at least one of the type depicted in Applicants' Figure 5, would block Trott's throughbores 56, and thus defeat the cannulation and related functionality of Trott's surgical instrument. Trott thus teaches away from including a bushing between adjacent links. The rejection of claim 11 over Trott should be withdrawn for this additional reason.

Claim 12 depends on claim 11, and thus distinguishes Trott for at least the same reasons claim 11 distinguishes. The rejection of claim 12 should likewise be withdrawn.

Rejections Under 35 U.S.C. §103

Claims 13-27 stand rejected under §103(a) as unpatentable over Trott in view of Kashuba et al. (5,098,437). Applicants take each rejection in turn.

Claims 13 and 14

Claims 13 and 14 depend on claim 1. As discussed in more detail above, claim 1 is amended to recite the including of exactly two bends between head and drive ends that define parallel rotational axes. Nothing in Trott or Kashuba et al. teach or suggest such a configuration, so this aspect of claim 1 is not obvious over those references. Claims 13 and 14 depend upon claim 1, and so distinguish Trott and Kashuba et al. for at least the same reasons claim 1 distinguishes.

Claims 15-27

Claim 15, as originally filed, recited a surgical tool with a head end for attaching to a releasing a joint-replacement cup that includes a threaded hole. An example of one such cup 200 is reproduced below from Applicants' Figure 2, and is shown to include a threaded hole 205. The head of the surgical tool of claim 15 includes a "threaded attachment actuator" for engaging the cup. As amended, the threaded attachment actuator of claim 15 includes "external threads" that engage "the external threads with the internal threads of the joint-replacement cup to secure the cup attachment to the cup..." Applicants' Figure 11 supports amended claim 15 and is reproduced below alongside Applicants' Figure 2. According to Applicants, "a pair of jaws 925 [are] adapted to extend into and engage with hole 205 of cup 200 (Figure 2)" (Spec., [0033]). Though threaded, jaws 925 can engage and disengage with threaded hole 205 without rotation. As an important consequence, "[t]ool 900 can release cup 200 while holding conduit 905 and handle 930 still, which prevents accidental dislodging of a properly placed cup 200" (*Ibid.*).

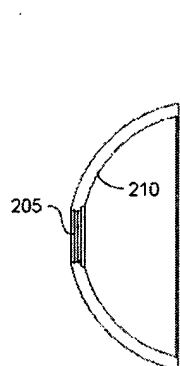


Fig. 2 (PRIOR ART)

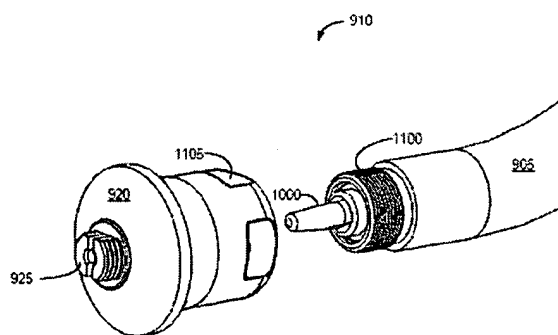


Fig. 11

Claim 15 was rejected over Trott and Kashuba et al. Of these references, Trott does not teach any manner of engaging a joint-replacement cup, and thus does not speak to elements of claim 15 relating to cup attachment. Kashubua et al. do teach a device for supporting and placing an acetabular cup, but the device of Kashuba et al. lacks a number of the features of Applicants' claim 15.

The devices of Kashuba et al. lack, for example, threads with which to engage an acetabular cup. The examiner finds support for threads in rim 56 (Office Action, page 4), but this reading of Kashuba et al. is incorrect: rim 56 is neither threads nor threaded (see e.g. Kashuba et al., Figure 3). The cup of Kashuba et al. is engaged via a groove 36, which the summary

describes as “a circumferential groove extending around the inner surface of the shell adjacent the open end thereof” (Kashuba et al., 3:48-50). Kashuba et al.’s Figure 7, which shows cup 14 in cross section, reveals no threads. The relevant portion of Kashuba et al.’s Figure 7 is reproduced below for the Examiner’s reference.

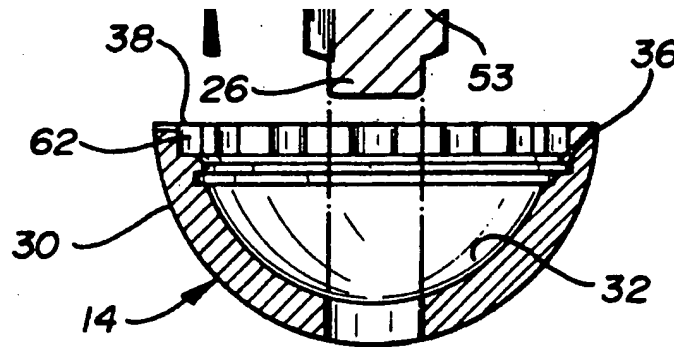


Figure 7 of Kashuba et al.

To establish a *prima facie* case of obviousness using a combination of references, the references (1) “must teach or suggest all the claim limitations,” and (2) “there must be some suggestion or motivation... to modify the reference or combined reference teachings” (MPEP 706.02(j)). The rejection of claim 15 fails on both counts. First, neither reference teaches a threaded attachment mechanism for a joint-replacement cup, so the combination fails to teach the “threaded attachment actuator” of claim 15. Second, in the absence of a threaded attachment actuator, there can be no suggestion to modify the references to include one. The rejection of claim 15 as obvious should therefore be withdrawn.

Claims 16-27 depend from claim 15, and therefore distinguish the references for at least the same reasons claim 15 distinguishes. The rejections of claims 16-27 should therefore be withdrawn.



Conclusion

In light of the foregoing amendments and arguments, Applicants' believe the pending claims to be in condition for allowance. If the Examiner's next action is other than allowance of the pending claims, the Examiner is requested to call Applicants' attorney at (925) 621-2113.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Box Non-Fee Amendment, Commissioner for Patent, Washington, D.C. 20231 on 7 June 2005.

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